Valtek Control Valves

Logix® Remote Mount Option

Installation
Operation
Maintenance

FCD LGENIM0001-01 8/13

Description:

The Logix® Remote Mount option is intended for use where the positioner may be inaccessible when mounted to the valve/actuator package or when vibration or other operating factors may exceed the Logix® positioner recommended operating conditions. The Logix® remote mount option consists of two (2) components: The Logix® positioner configured for remote mount operation, and the remote feedback unit. The remote feedback unit must be wired to the Logix® positioner following applicable standards for hazardous location installations. *NOTE: For Logix 3200 positioner operation refer to Instruction, Operation and Maintenance Manual LGENIM0059. For the Logix 520MD+ positioner operation refer to IOM LGENIM0105.*

Installation:

To mount a Logix Low Profile Remote Mount to a Valtek linear Mark One valve, refer to Figure 1: Mounting to Mark I Linear Valves and proceed as outlined below.

⚠ CAUTION: *Remember to remove the air supply from the Logix positioner before installing the remote mount unit.*

➲ **NOTE:** *The feedback shaft has a clutch mechanism that allows for over-rotation of the shaft for easy adjustments.*

1   Remove washer and nut from follower pin assembly. Insert pin into the appropriate hole in follower arm, based on stroke length. The stroke lengths are stamped next to their corresponding holes in the follower arms. Make sure the unthreaded end of the pin is on the stamped side of the arm. Reinstall lock washer and tighten nut to complete follower arm assembly.

2   Slide the slot in the follower arm assembly over the flats on the position feedback shaft in the back of the positioner. Make sure the arm is pointing toward the side of the positioner with ports A, B, and Supply. Slide the lock washer over the threads on the shaft and tighten down the nut.

3   Align the bracket with the three outer mounting holes on the positioner. Fasten with 1/4" bolts.

4   Screw one mounting bolt into the hole on the yoke mounting pad nearest the cylinder. Stop when the bolt is approximately 3⁄16" from being flush with mounting pad.

5   Slip the large end of the teardrop shaped mounting hole in the back of the positioner/bracket assembly over the mounting bolt. Slide the small end of the teardrop under the mounting bolt and align the lower mounting hole. Insert the lower mounting bolt and tighten the bolting.

6   Position the take-off arm mounting slot against the stem clamp mounting pad. Apply Loctite 222 to the take-off arm bolting and insert through washers into stem clamp. Leave bolts loose.

7   Slide the appropriate pin slot of the take-off arm, based on stroke length, over the follower arm pin. The appropriate stroke lengths are stamped by each pin slot.

➲ **NOTE:** *The feedback shaft has a clutch mechanism that allows for over-rotation of the shaft for easy adjustments.*

Selection		Code	Example
		3	3
Protocol	HART	2	2
Diagnostics	Standard	0	1
	Advanced (with pressure sensing)	1	
	Pro (with sensing and full ValveSight dianostics)	2	
Material	Aluminum, White Paint (Valtek)	0	0
	Stainless Steel, No Paint (Valtek)	1	
	Aluminum, Black Paint (Automax)	2	
	Aluminum, Food-Grade White Paint (Automax)	3	
	Aluminum, Black Paint (Accord)	4	
	Aluminum, Food-Grade White Paint (Accord)	5	
Design Version			MD
Certifications	FM Metal Nameplate - Explosion Proof	01	10
	FM Metal Nameplate – Intrinsically Safe	02	
	INMETRO Mylar Multiple Concept Label Ex ia IIC T4/T5; Ex d IIB+H T5 (Brazil)	06	
	ATEX Metal Nameplate – II 2 G D; Ex d IIBB+H2, Ex tD A21. (GOST GGTN Ex d IIB+H2)	07	
	North America Metal Nameplate Explosion Proof Class Intrinsically Safe: Non-Incendive.	10	
	General Purpose	14	
	ATEX Metal Nameplate – II 1 G D; Ex ia IIC, Ex iaD A20 (Gost GGTN Ex I IIC)	15	
	IECEx Metal Nameplate – Ex d IIB+H2 (Kosha Ex d)	16	
	IECEx Metal Nameplate – Ex ia IIC	21	
	ATEX: Mylar, Multiple Concept Label: Explosion Proof: II2G Ex d IIB+H T5; II2D Ex tD A21 Intrinsically Safe: II1G Ex ia IIC, T4 II1D Ex iaD 20 T95 °C Non-incendive: II3G Ex nL nA IIC, T4 II3D Ex tD A22 T95 °C	28	
	IECEx : Mylar Multiple Concept Label; Explosion Proof, Ex d IIB+ H2, Intrinsically Safe Ex ia IIC	33	
	North America: Mylar Multiple Concept Label FM/CSA, Explosion Proof, Intrinsically Safe Non-Incendive	34	
	KOSHA* Ex d IIB+H2	35	
Shaft	DD 316 Stainless Steel Shaft (Valtek Standard)	D6	D6
	NAMUR 316 Stainless Steel (VDI/VDE 3845)	N6	
Conduit Connections	1/2 in. NPT	E	M
	M20	M	
Action	Four-way (Double-Acting)	04	4V
	Three-way (Single-Acting)	03	
	Four-way Vented (Double-Acting)	4V	
	Three-way Vented (Single-Acting)	3V	
Temperature	Low Temperature (refer to certification table)	40	40
Gauges	SS with brass internals, psi (bar/kPa) (Valtek Standard)	OG	KS
	SS with SS internals, psi (bar/kPa)	OS	
	SS with brass internals, psi (kg/cm^2)	KG	
	SS with SS internals, psi (kg/cm^2) KS	KS	
	No Gauges	U	
Special Options	No Special Options	OO	OF
	4-20 mA Position Feedback	OF	
	Remote Mount Feedback	RM	
	Fail Option Feedback *	SF	

For each category, select the code for one of the options. ➲ **NOTE:** *Field conversions to remote mount are not allowed with certified product.*

*Contact factory before specifying this option ➲ **NOTE:** *Replacement components are not available. Contact your Flowserve representative for repairs.*

520MD+ MODEL CODE SPECIFICATION

Selection	Description	Code	Example
Body	Intrinsically Safe, IP-26	5	5
Communications	HART[1]	2	2
Diagnostics	Standard (Basic Functionality)[2]	0MD+	1MD+
	Advanced (With Pressure Sensing)	1MD+	
	Pro (With Full ValveSight Diagnostics)	2MD+	
Certifications	General Purpose	14	37
	North America/ATEX/IECEx Ex ia	37	
			-
Housing	Aluminum - Black Base with White Cover	W	W
	Aluminum - Black Base with Yellow Cover	Y	
	Aluminum - Black Base with Black Cover (Automax)	B	
	Aluminum - Black Base with Black Cover (Accord)	A	
Threaded Connections	Mounting: 5/16" 18 UNC, Pneumatics: 1/4" NPTF, Conduit: 1/2" NPTF, Vents 1/4" NPTF	1	1
	Mounting: M8 x 1.25, Pneumatics: 1/4" NPTF, Conduit: M20 x 1.5, Vents 1/4" NPTF	2	
	Mounting: M8 x 1.25, Pneumatics: G1/4", Conduit: M20 x 1.5, Vents G1/4"	3	
Shaft	D - 316 Stainless Steel Shaft (Valtek Standard)	D	D
	NAMUR - 316 Stainless Steel Shaft (VDI/VDE 3845)	R	
Action	Three_way_Single_Acting_Poppet_Style_Relay	1	1
	Three_way_Single_Acting_Spool_Style_Relay	2	
	Four_way_Double_Acting_Spool_Style_Relay	3	
Positioner Indication	No Indicator	0	1
	Flat Indicator	F	
	Domed Indicator	D	
Special Options	No special options	0	0
			-
Manifold	No_Manifold	00	0
	Gauge_Manifold_Aluminum	GM	
Gages	No Gauges	0	0
	Nickel Plated with Brass Internals, psi (bar/kPa)	1	
	Nickel Plated with Brass Internals. psi (kg/cm2)	2	
	SS with SS Internals. psi (bar/kPa)	3	
	SS with SS Internals. psi (kg/cm2)	4	
	UCC Press Test Plug, 1/8" NPT	A	
	Valve, Tank, Schrader 645A	B	
			-
Display	No LCD	0	1
	LCD	1	
Auxiliary Card Slot 1	Slot 1 - No Card	0	0
	Slot 1 - Multi-Function Card[3,4]	1	
Auxiliary Card Slot 2	Slot 2 - No Card	0	0
	Slot 2 - Multi-Function Card[3,4]	1	
Switches	No Switches	0	0
	Mechanical Limit Switch[4]	1	
	Reed Switch	2	
	Namur V3 type proximity switch, P+F NJ2-V3-N[4]	3	3
	Slot Type NAMUR Sensor, P+F SJ2 S1N[4]	4	
	Slot Type NAMUR Sensor, P+F SJ2 SN[4]	5	
	Namur V3 type proximity switch, P+F NBB2-V3-E2[4]	6	
	Remote Mount Feedback[4,7]	7	

HART 6 standard. Can be configured as HART 5 in the field.

Can be upgraded to 521MD+ or 522MD+ in the field.

Can be configured as Analog Output, Discrete Output or Discrete Input in the field.

Only available for general purpose (certification option 14).

Available for Cookeville and China markets only.

"Positioner Only" diagnostics. No LCD. No Aux Cards.

The low profile remote mount module is included with this option and may be shipped separately.